

Abstract 024

Category: Research on nursing diagnosis

TITLE: **Clinical validation of risk for decreased cardiac tissue perfusion after percutaneous coronary intervention: a retrospective cohort study**

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Introduction with problem statement:

After percutaneous coronary intervention (PCI), patients are susceptible to a new decrease in cardiac (coronary) circulation, which may compromise health, i.e., *risk for decreased cardiac tissue perfusion* (RDCTP - 00200).⁽¹⁻²⁾ Therefore, nurses should be aware of significant predictors of RDCTP in order to detect a possible complication and intervene early. The aim of this study was to clinically validate the nursing diagnosis, RDCTP, by identifying its predictors after PCI.

Methods:

A retrospective cohort study with data from 1,542 adults undergoing PCI in São Paulo/Brazil, from March/2008 to July/2015. Demographic, anthropometric, clinical, and procedural variables were collected as explanatory. Patients with elevations of cardiac biomarkers above three times the upper reference limit normal for the laboratory, within 24 hours of procedure,⁽³⁾ were diagnosed with the endpoint periprocedural myocardial infarction (PMI), equivalent to decreased cardiac tissue perfusion in this study. Associations between the explanatory variables and the endpoint were investigated by the unpaired Student t-test, Mann-Whitney test, Chi-square test, Fisher's exact test, or likelihood-ratio. Those variables with $p < 0.20$ and that were clinically relevant were submitted to multivariate logistic regression, to determine the predictors of PMI, expressed as odds ratios (OR) and 95% confidence intervals (CI).

Results and discussion:

The mean age of the sample was 66.4 ± 12.1 years, 79.4% males. The prevalence of PMI was 12.1% ($n=187$). The independent predictors of PMI were: age (OR=1.02, IC 95%=1.01- 1.03, $p=0.008$), multi-vessel disease (OR=1.79, IC 95%=1.30-2.46, $p < 0.001$), and intraprocedural lesion complications (OR=4.56, IC 95%=3.03-6.87, $p < 0.001$).

Impact on the discipline:

These results increase the level of evidence of RDCTP by refining its risk factors, which can support nurses' clinical judgment.

References

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